

INFORMATION SHEET

- **CONTENT:** We will consider various means of transmitting information through physical media (modulation techniques) in the presence of noise. Both analog and introductory digital systems will be considered. Linear system theory and probability are at the heart of all our discussions. Thus, a strong linear systems and probability background is necessary. The first portion of the course will provide a review of important concepts. Other mathematics such as linear algebra and stochastic processes will be provided on an as needed basis.
- **PHILOSOPHY:** You will be required to think carefully and critically about the material in this course. For example, you might be required to derive new material on the homework or even on an examination using what you've been given in lecture. If you are used to simply using formulas ("plug & chug") this course offers a great opportunity to expand your problem-solving ability.
- **SECTIONS & INSTRUCTORS:**
 - **Place & Time:** SEC-118, T&TH 5th period, 3:20-4:40
 - **Instructor:** C. Rose, EE122 , 445-5250, email: crose@winlab.rutgers.edu. Office hours: TBA
 - **TA:** Probably none
- **WEBPAGE:**
 - The course web page is <http://www.winlab.rutgers.edu/~crose/index322.html>. All handouts will be available on the web page including homework assignments, quizzes, exams and solutions. Watch the web page for course announcements (like pop quizzes etc.). There is also now a moderated mailing list (pcs_08@rams.rutgers.edu) to which you can post questions/comments. You can also contact me directly at crose@winlab.rutgers.edu.
- **OFFICE HOURS:**
 - **Instructor:** TBA in EE104
 - **TA:** (not applicable)
- **TEXTS:**
 - REQUIRED: **Communication Systems, 4th Edition**, Simon Haykin, Wiley.
- **PREREQUISITES:** Linear Signals and Systems (332:345), Probability (332:321) **NOTE:** Principles of Communication Systems (332:322) depends *heavily* upon linear system theory and probability.
- **EXAMINATION POLICIES:**
 - **Exam Notes:** For Quiz I you may prepare one side of one 8.5 × 11 sheet of paper as notes, and two sides for Quiz II. Three sides will be allowed for the final examination. Your "cheat sheet" is intended as a pacifier. It's primary use is as a study aid and focus.

- **Grading Errors:** Solutions will be returned with all examinations. **All questions about grades must be submitted IN WRITING within one week after each examination is returned. No grade change requests will be accepted after this period.** The materials you submit will be reviewed by the TA and myself. Please keep in mind that we will reconsider the entire examination as well as the area(s) requested by you. Thus, we may catch grading errors in a resubmitted examination which hurt your grade rather than help it. We will return the regraded exam as soon as possible. This grade is final.
- **Missed Exams:** A missed exam results in a grade of zero. Only in exceptional cases will a 1-hour oral examination be administered to probe your understanding of the material. There will be no written makeup examinations. As always, absences must be cleared by the Dean.
- **Cheating:** My problem with cheating is twofold: 1) it is a moral outrage against honest students who are effectively penalized for their honesty, and 2) the cheating student does not learn the material and this reflects poorly on Rutgers when they enter the work force (and once again penalizes the honest student by association).

Since it offends my sensibilities to watch idly while people get shafted, if cheating becomes a problem I'll institute some rather Orwellian/draconian measures to curb the illicit activity during examinations. Smile, you're on secret camera!

Needless to say, if you are caught cheating you will fail the course and face expulsion. In addition, I will do all in my legal power to make sure your exploits are well-known both within and outside the University community. You will find it's a small world come job-hunting time.

- **GRADING:** The examinations will be weighted as follows:

- **Quiz I: 30%**
- **Quiz II: 30%**
- **Final: 40%**
- **Problem Sets:** 0% → Problem sets will be assigned regularly about once every week or so **WITH SOLUTIONS**, so they will not be graded. The importance of homework as a comprehension and study aid cannot be overemphasized. I have gained the unfortunate but apt reputation of writing difficult exams which require careful thought and not regurgitation. This is a subtle warning that not doing the homework (by copying old solutions for example) is courting almost certain disaster.